

INTRODUCTION:

Adam Tech MTJ series Modular Telephone Jacks are a complete line of PCB and wire leaded jacks which are UL and CSA approved and meet all required FCC rules and regulations. Adam Tech offers a multitude of sizes (4p2c thru 10p10c) with styles including single, ganged and stacked versions with options of ferrite or magnetic filtering and or metal shielding. Jacks with integral LED's and combination hybrids such as MTJ/USB jacks are also available. These jacks are available in thru-hole or SMT mounting.

FEATURES:

- UL 1863 recognized
- FCC compliant to No. 47 CFR part 68
- Magnetic and Ferrite filtered types
- 4,6,8 and 10 positions available
- Single, stacked or ganged
- Hi-Temp and LED options
- Unshielded or Metal Shielded
- Thru-Hole or SMT mounting
- Cat. 5 & 5E ANSI/TIA/EIA 568.2

MATING PLUGS:

Adam Tech modular telephone plugs and all industry standard telephone plugs.

SPECIFICATIONS:

Material:

- Insulator: PBT, Nylon or ABS, rated UL94V-0
- Insulator Colors: black or medium gray
- Contacts: Phosphor Bronze
- Shield: Phosphor Bronze, tin plated

Contact Plating:

- Flat contacts: gold flash over nickel underplate on contact area, Tin over copper underplate on solder tails.
- Round contacts: gold flash over nickel underplate overall

Electrical:

- Operating voltage: 150V AC max.
- Current rating: 1.5 Amps max.
- Contact resistance: 20 mΩ max. initial
- Insulation resistance: 500 MΩ min.
- Dielectric withstanding voltage: 1000V AC for 1 minute

Mechanical:

- Insertion force: 4 contacts: 17.6N
- 6 contacts: 20.6N
- 8 contacts: 22.5N
- 10 contacts: 24.5N

Durability: 500 Cycles

Temperature Rating:

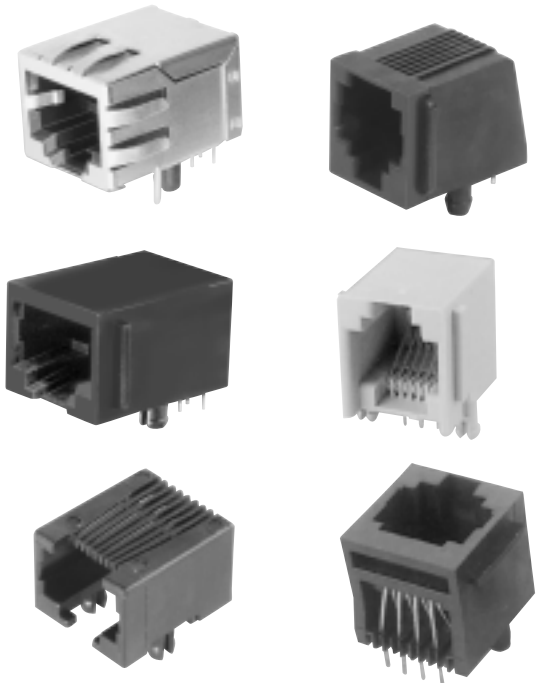
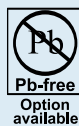
Operating temperature: -40°C to +125°C

PACKAGING:

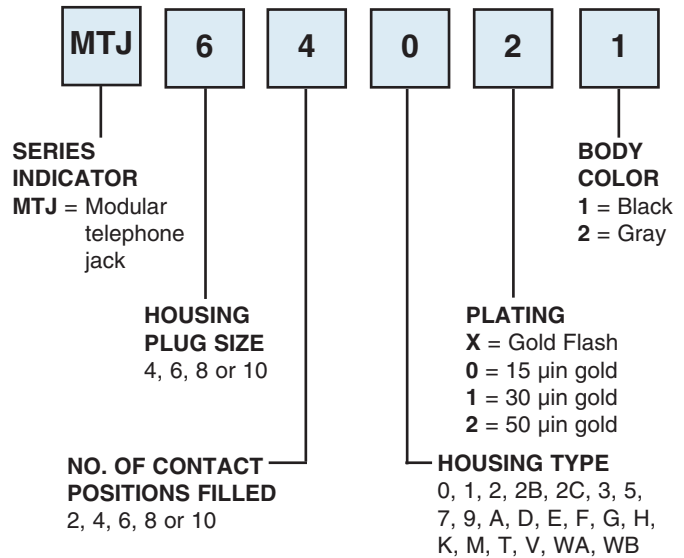
Anti-ESD plastic trays

SAFETY AGENCY APPROVALS:

UL Recognized E224049



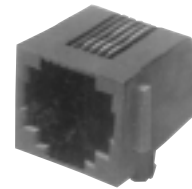
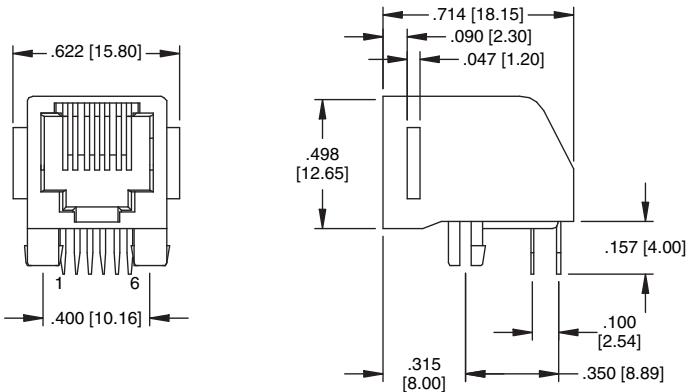
ORDERING INFORMATION



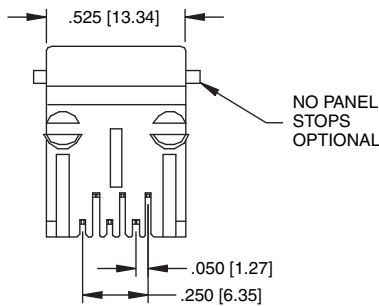
OPTIONS:

- Add designator(s) to end of part number
- S** = Face shielded jack (Body type 0 only)
- FS*** = Five sided shield (Illustrations pages 16-32)
Consult factory for custom shielding requirements
- SMT** = Surface mount tails, housings 0, 5, 9, G & W with Hi-Temp insulator
- N** = No panel stops
- K** = Keyed telephone jack
- HT** = Hi-Temp insulator for Hi-Temp soldering processes
- RC** = RoHS compliant lead-free product with Hi-Temp insulator
- PG** = Panel ground tabs

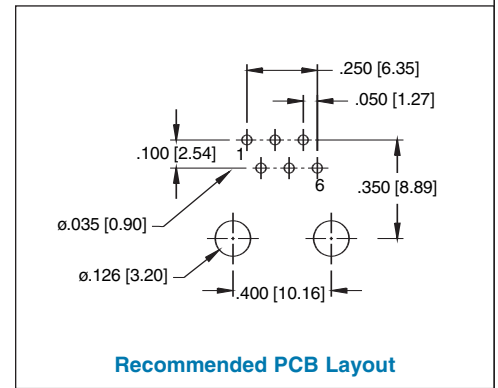
TYPE 0



MTJ-660X1

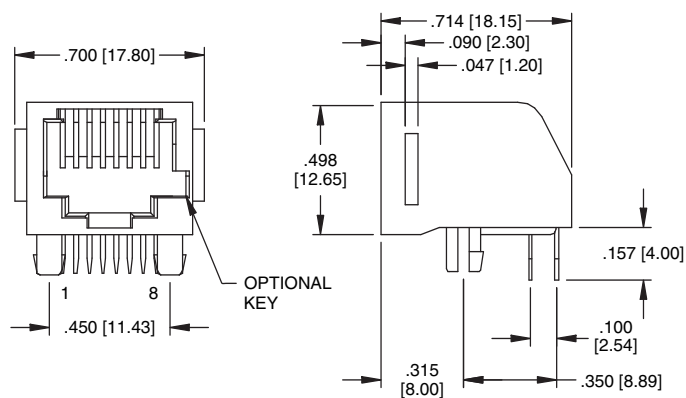


Face Shield Option

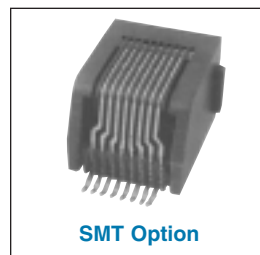
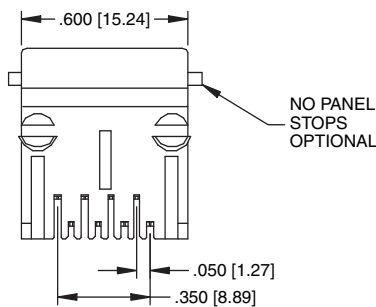


Recommended PCB Layout

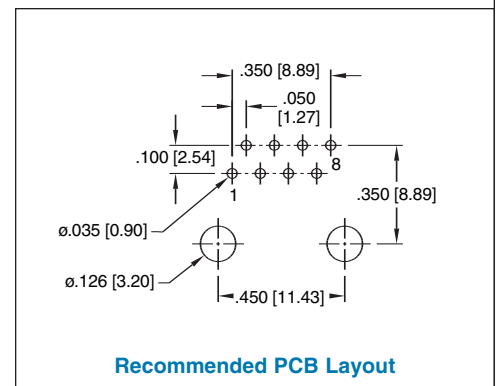
TYPE 0



MTJ-880X1



SMT Option



Recommended PCB Layout

Dimensions: .590 [15.00], .450 [11.43], .681 [17.30], .484 [12.30], .138 [3.50], .287 [7.30], .350 [8.89], .100 [2.54], .050 [1.27], .250 [6.35]

FLAT CONTACTS OPTIONAL

TYPE 9
6p4c
6p6c

MTJ-669X1

Recommended PCB Layout

Dimensions: $\phi .126$ [3.20] (2x), .450 [11.43], .250 [6.35], .050 [1.27], .100 [2.54], $\phi .035$ [.89] (6x), .250 [6.35]

Dimensions: .590 [15.00], .450 [11.43], .681 [17.30], .484 [12.30], .138 [3.50], .287 [7.30], .350 [8.89], .100 [2.54], .050 [1.27], .350 [8.89]

FLAT CONTACTS OPTIONAL

TYPE 9
8p8c

MTJ-889X1

Recommended PCB Layout

Dimensions: $\phi .126$ [3.20] (2x), .450 [11.43], .250 [6.35], .050 [1.27], .100 [2.54], $\phi .035$ [.89] (8x), .350 [8.89]

Dimensions: .622 [15.8], .450 [11.43], .732 [18.6], .520 [13.20], .327 [8.3], .100 [2.54], .350 [8.9], .050 [1.27], .350 [8.89]

TYPE 9
8p8c
Shielded

MTJ-889X1-FS

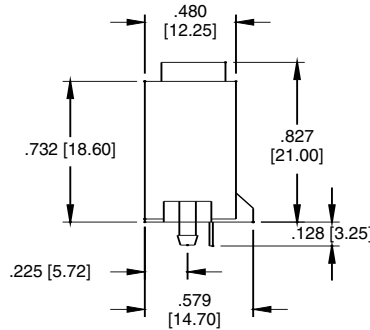
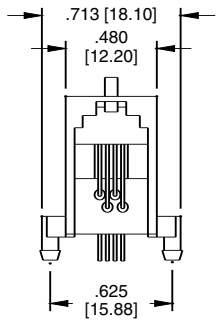
SMT Option

Recommended PCB Layout

Dimensions: $\phi .126$ [3.20] (2x), .610 [15.15], .450 [11.43], $\phi .063$ [$\phi 1.60$], .120 [3.05], .250 [6.35], .050 [1.27], .100 [2.54], $\phi .035$ [.89] (8x), .350 [8.89]

TYPE 7

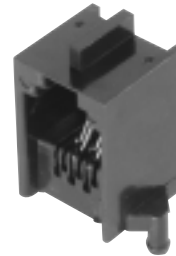
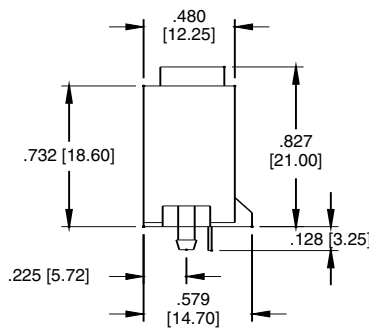
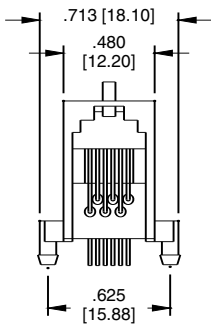
4p4c



MTJ-447X1

TYPE 7

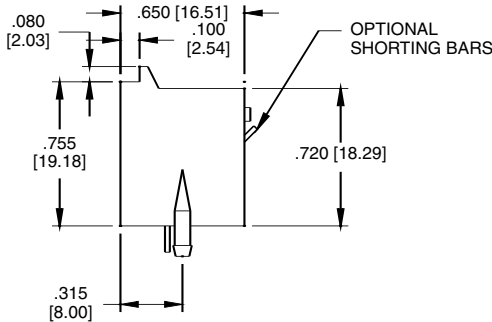
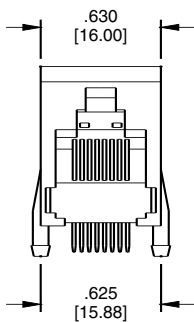
6p4c
6p6c



MTJ-647X1

TYPE 7

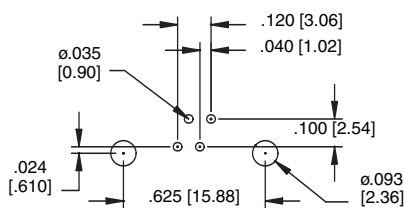
8p8c



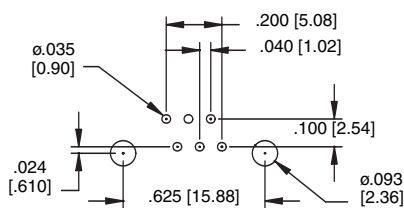
MTJ-887X1

Recommended PCB Layout

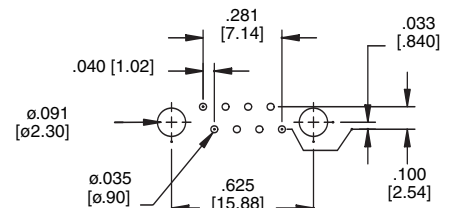
4p4c



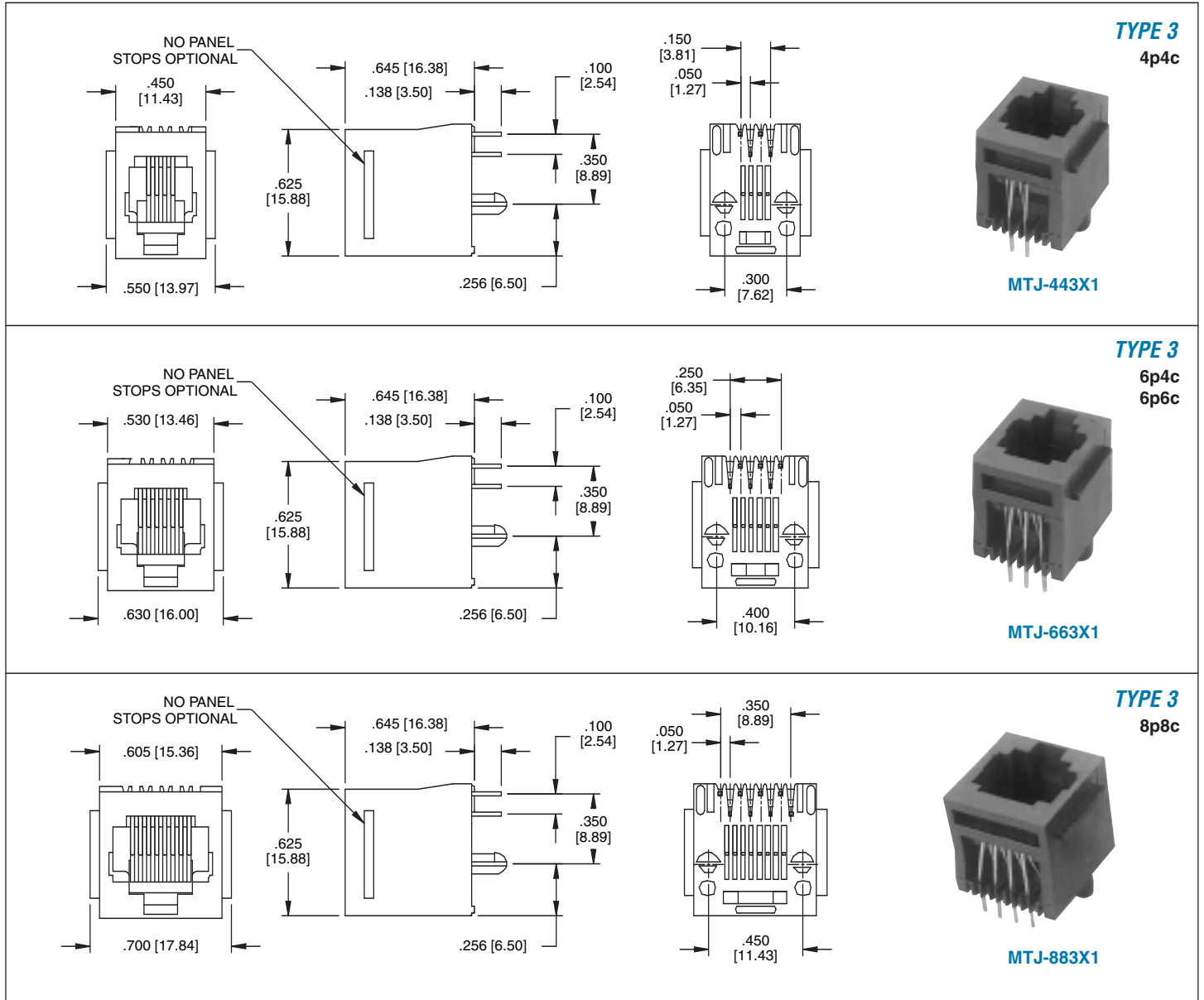
6p4c
6p6c



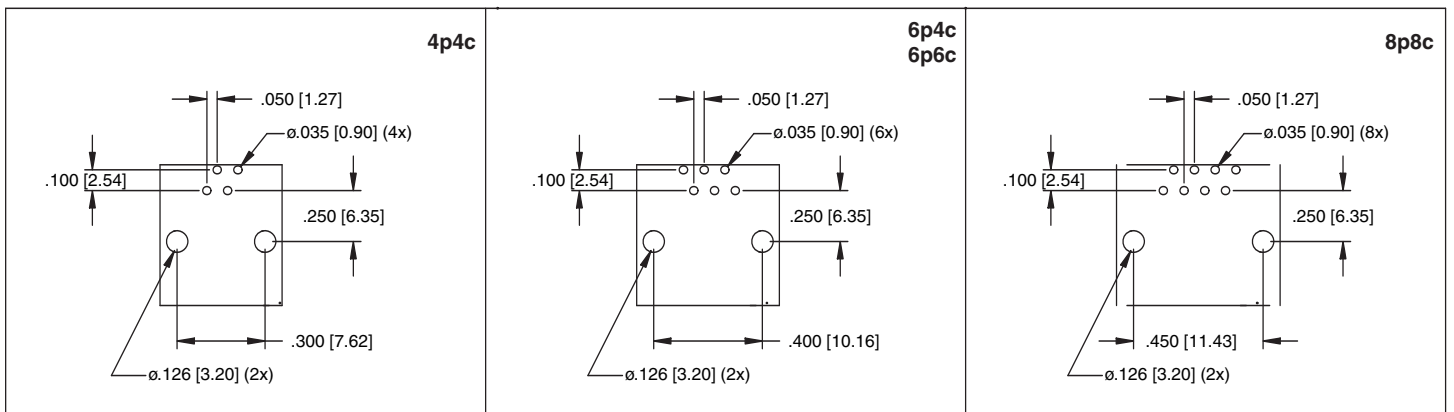
8p8c

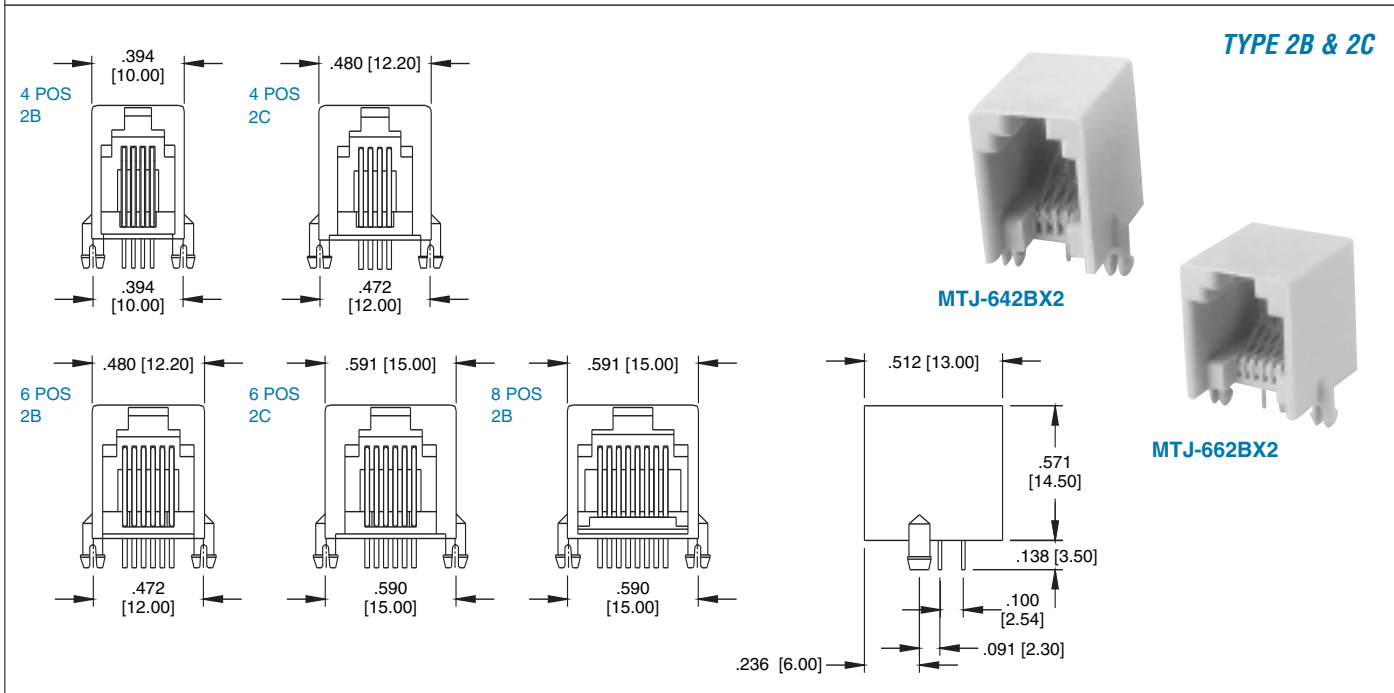
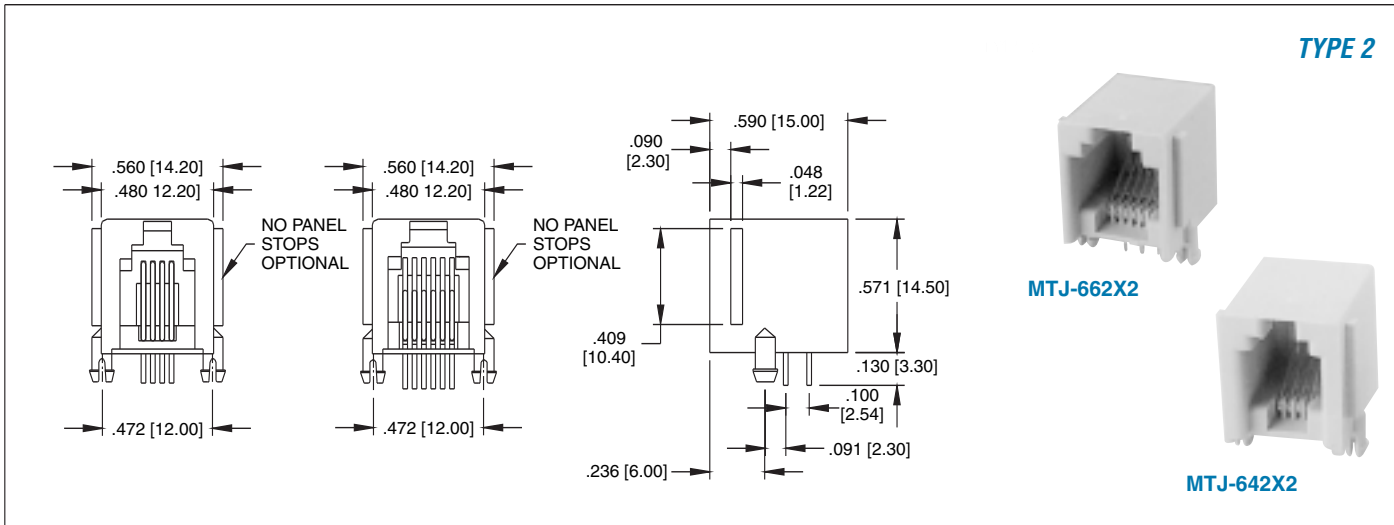


<p>TYPE 5 4p4c</p> <p>MTJ-445X1</p>	<p>Recommended PCB Layout</p>
<p>TYPE 5 6p6c</p> <p>MTJ-665X1</p>	<p>Recommended PCB Layout</p>
<p>TYPE 5 8p8c</p> <p>MTJ-885X1</p>	<p>SMT Option</p> <p>Recommended PCB Layout</p>

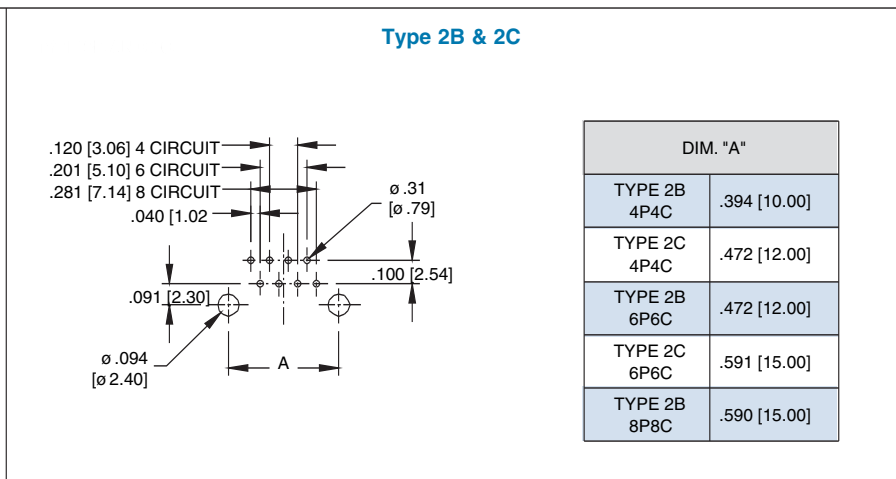
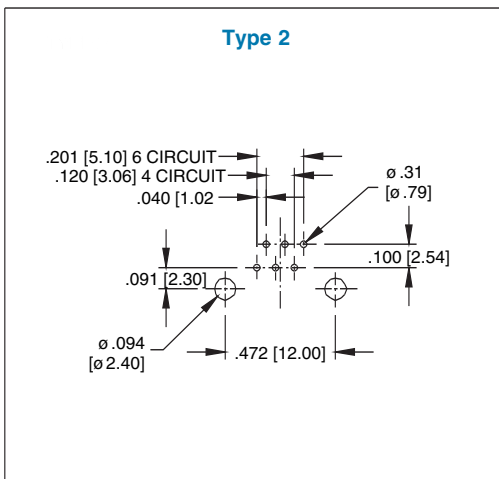


Recommended PCB Layout





Recommended PCB Layout



MTJ-44FX1

TYPE F
4p4c
6p6c

Recommended PCB Layout

MTJ-88FX1

TYPE F
8p8c

Recommended PCB Layout

MTJ-88FX1-FS

TYPE F
8p8c
Shielded

Recommended PCB Layout

MTJ-64GX1

TYPE G
4p4c
6p6c

Recommended PCB Layout

MTJ-88GX1

TYPE G
8p8c

Recommended PCB Layout

MTJ-88GX1-FSD

Recommended PCB Layout

SHIELD PIN LOCATION
 FSA OPTION: A = .170 [4.32]
 FSB OPTION: A = .144 [3.66]
 FSE OPTION: A = .120 [3.05]

PCB Layout (FSA, FSB, & FSE)

ADAM TECH MODULAR TELEPHONE PLUGS

MTP SERIES

ADAM TECHNOLOGIES

INTRODUCTION:

Adam Tech MTP series Modular Telephone Plugs are manufactured to terminate flat oval or round telephone cord to REA and Cat. 5 EIA/TIA specifications. Our double strain relief design, molded in polycarbonate, is manufactured with contacts pre-loaded in a variety of sizes and options including shielding and specific contacts for flat or round cable. Adam Tech is a major supplier of telephone line cords to the telecommunications industry.

FEATURES:

- Preassembled Contacts
- REA Compliant Terminations
- Cat. 5 and 5E available
- Contacts for Flat or Round wire
- Short or Long body choices
- Shielded versions

MATING TELEPHONE JACKS:

Adam Tech modular telephone jack series and all industry standard telephone Jacks.

SPECIFICATIONS:

Material:

Insulator: Polycarbonate, rated UL94V-0
Insulator Color: Clear
Contacts: Phosphor Bronze

Contact Plating:

50 µin Gold (optional 15 or 30 µin) over nickel underplate.

Electrical:

Operating voltage: 150V AC max.
Current rating: 1.5 Amps max.
Contact resistance: 20 mΩ max. initial
Insulation resistance: 500 MΩ min.
Dielectric withstanding voltage: 1000V AC for 1 minute

Mechanical:

Cable to plug tensile strength: 7.71 Kgs (17 lbs) min.
Durability: 250 Cycles min.
Wire range: 26 to 28 Awg

Temperature Rating:

Operating temperature: -40°C to +70°C

PACKAGING:

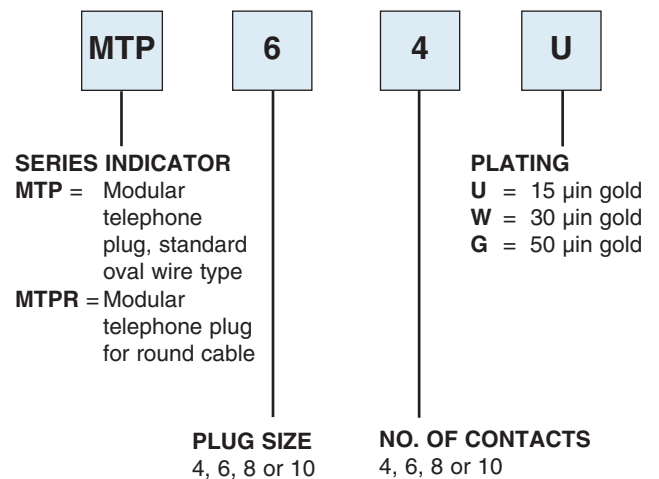
Anti-ESD plastic bags

SAFETY AGENCY APPROVALS:

UL Recognized File No. E224053



ORDERING INFORMATION

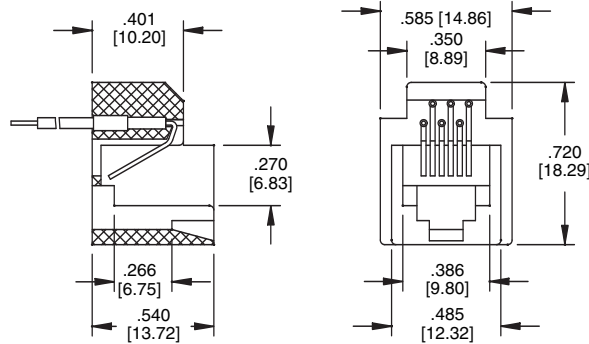
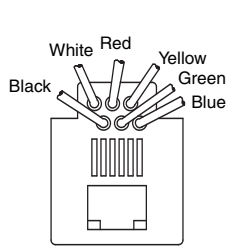


OPTIONS:

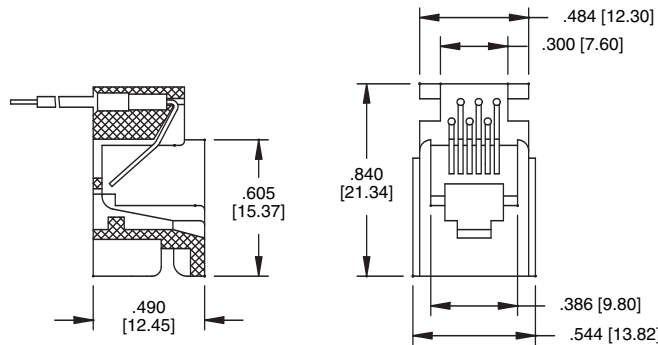
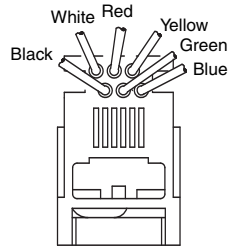
Add designator(s) to end of part number

- K** = Molded in key (Plug size 8 or 10 only)
- S** = Solid wire contacts
- EMI** = Metal shielded type (Plug size 8 or 10 only)
- OL** = Offset Latch (Plug size 6 only)

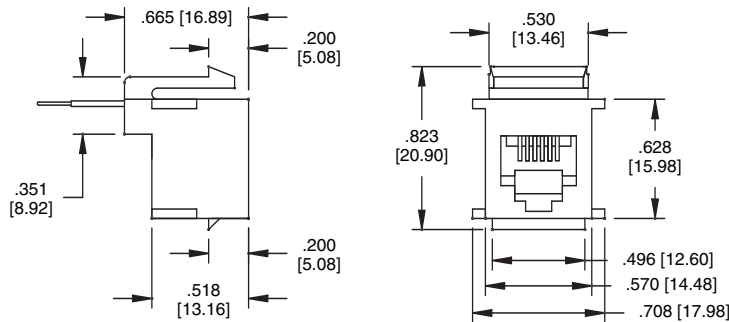
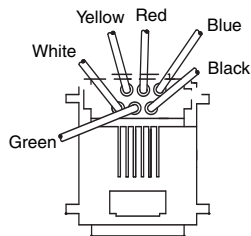
MTJP-623K4
MTJP-623K6



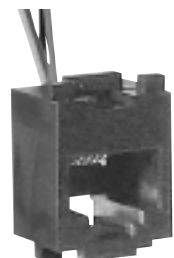
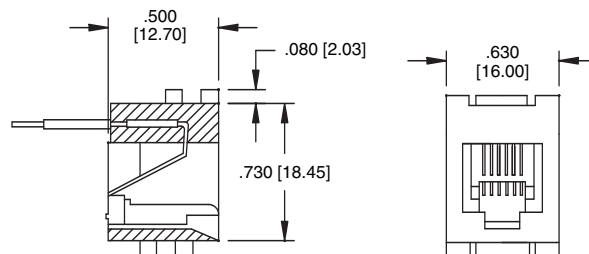
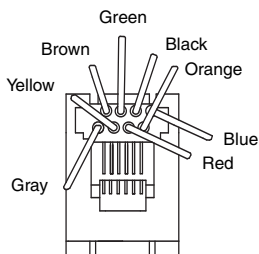
MTJP-623P4
MTJP-623P6



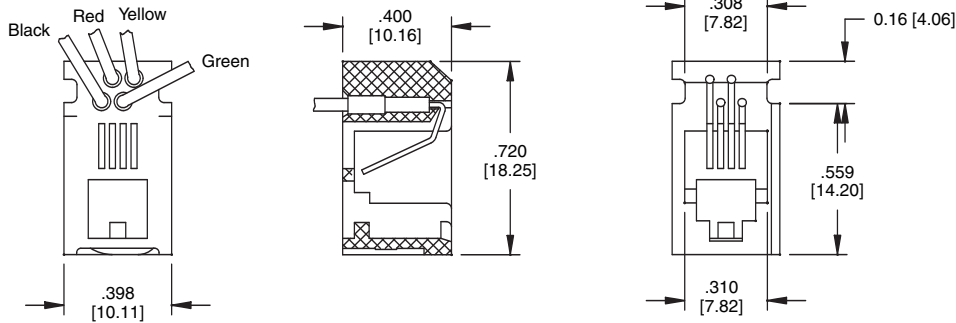
MTJP-648K4
MTJP-648K6



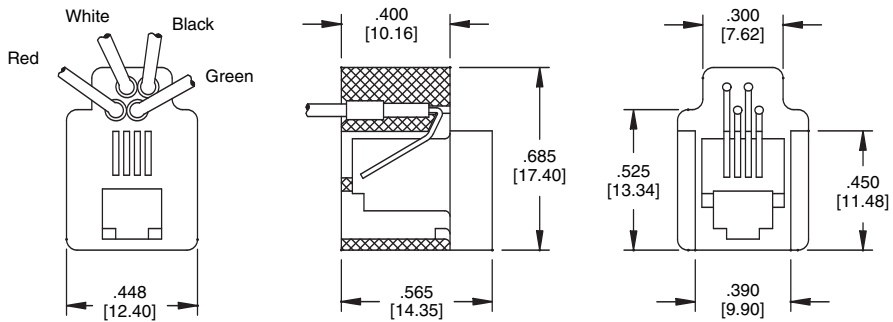
MTJP-641
MTJP-641 KEYED



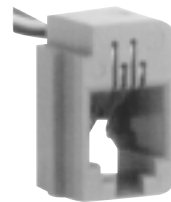
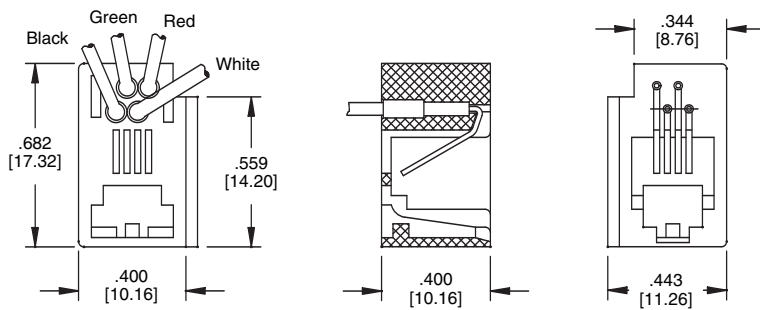
MTJP-616L



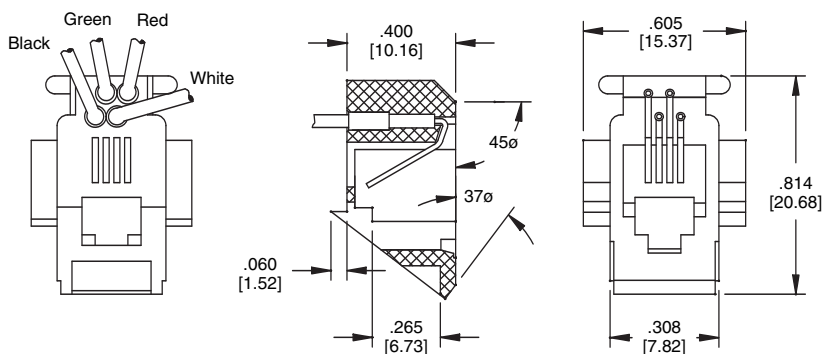
MTJP-616M



MTJP-616E



MTJP-616W



INTRODUCTION:

Adam Tech MTJP Series Wire Leaded Telephone Jacks are a full series of Handset and Panel Jacks conveniently prepared with wire leads ready for final assembly. This series has a multitude of housing shapes to fit many specific applications. They are offered in 4, 6 & 8 positions and with choice of Stripped and Tinned leads or leads with Spade Terminals and choice of contact plating. Adam Tech Jacks are UL and CSA approved and meet all required FCC rules and regulations.

FEATURES:

- UL & CSA approved
- FCC compliant to No. 47 CFR part 68
- Prepared for Final Assembly
- 4P, 6P and 8P versions
- Custom Jacks available

MATING PLUGS:

All telephone line cords manufactured with telephone plugs

SPECIFICATIONS:

Material:

Insulator: ABS, (Nylon 66 optional), rated UL94V-0
 Insulator Colors: Medium gray or black
 Contacts: Phosphor Bronze
 Wires: 26 Awg, UL-1061, 80°C, VW-1, 300V.

Contact Plating:

Gold Flash over Nickel underplate on contact area.

Electrical:

Operating voltage: 150V AC max.
 Current rating: 1.5 Amps max.
 Contact resistance: 20 mΩ max. initial
 Insulation resistance: 500 MΩ min.
 Dielectric withstanding voltage: 500V AC for 1 minute

Mechanical:

Insertion force: 4 Contacts: 500g, 6 contacts 750g
 8 contacts: 900g, 10 contacts: 1000g
 Durability: 500 Cycles

Temperature Rating:

Operating temperature: -40°C to +125°C

PACKAGING:

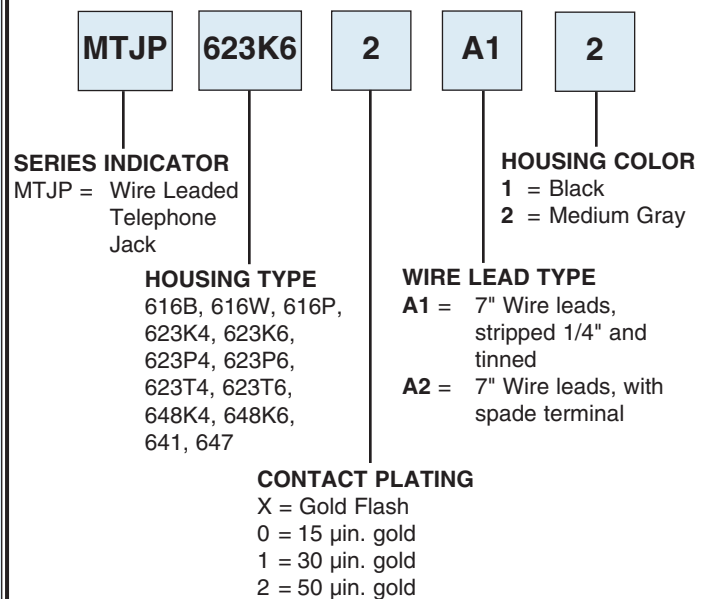
Anti-ESD plastic bags

APPROVALS AND CERTIFICATIONS:

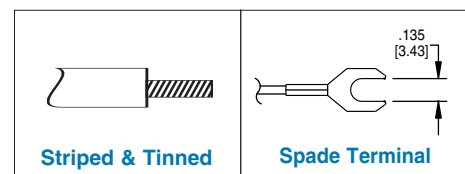
UL Recognized E224049



**ORDERING INFORMATION
MTJP SERIES WIRE LEADED JACKS**

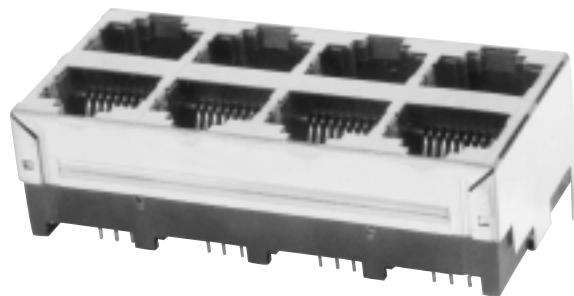
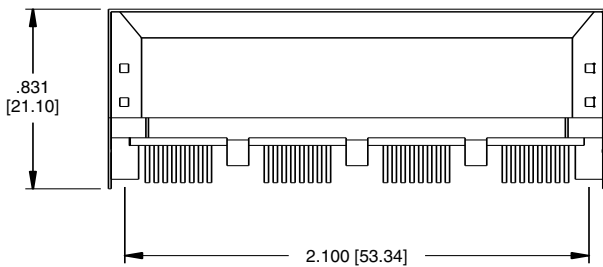
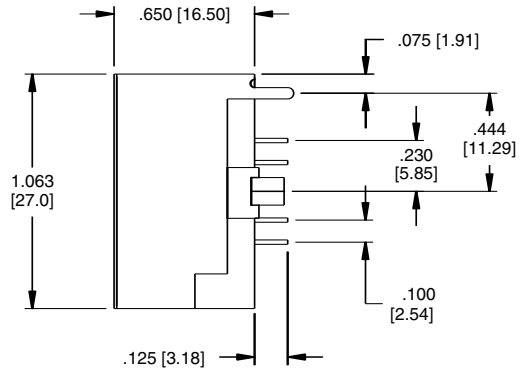
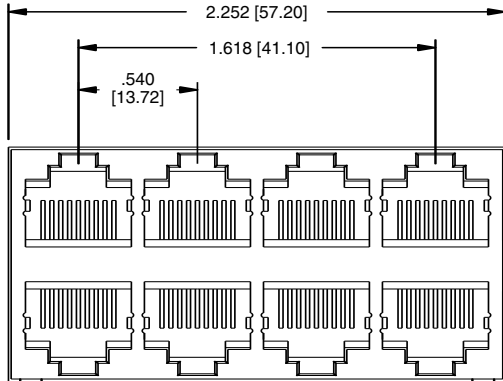


Wire Lead Options

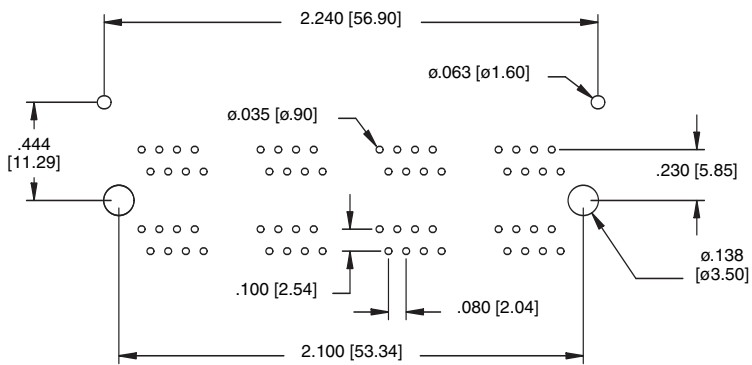


TYPE C

8p8c

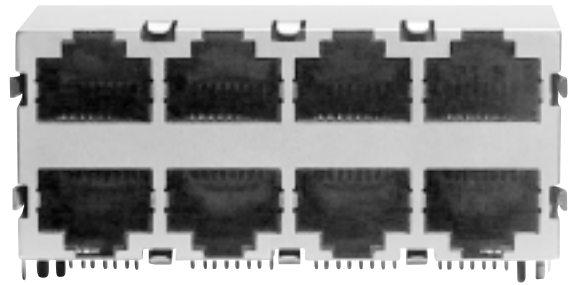
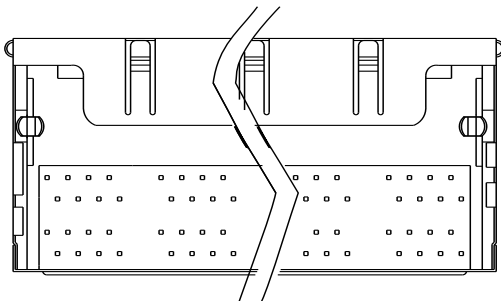
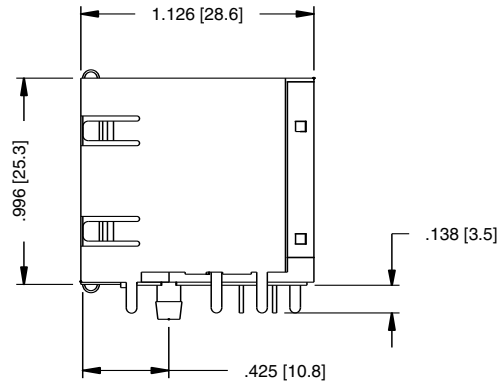
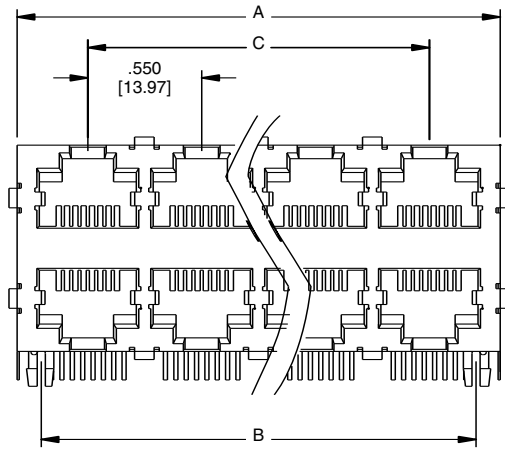


MTJG-8-88CX1-S

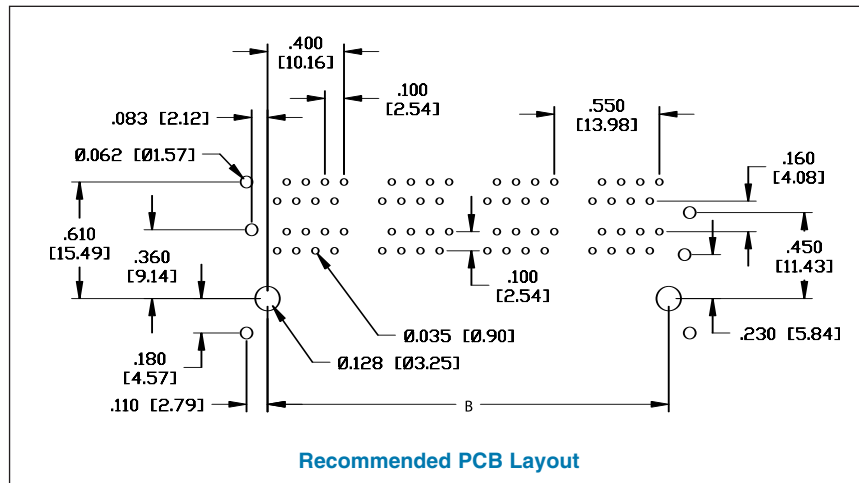


Recommended PCB Layout

TYPE J
8p8c



MTJG-8-88JX1-FSG-PG

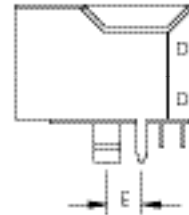
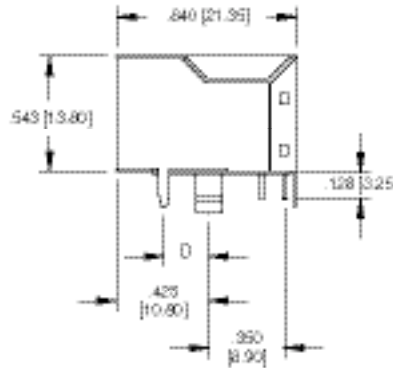
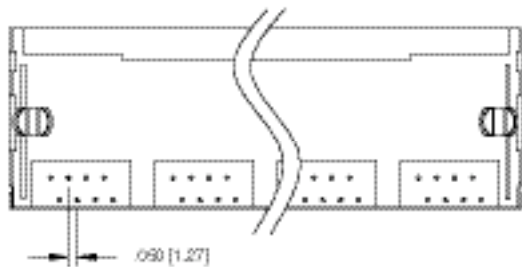
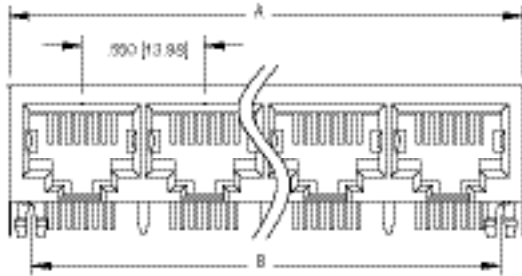


Recommended PCB Layout

PART NUMBER	PORTS	DIMENSIONS		
		A	B	C
MTJG-6-88JX1-FSG-PG	2 X 3	1.780 [45.21]	1.549 [39.34]	1.100 [27.94]
MTJG-8-88JX1-FSG-PG	2 X 4	2.33 [59.18]	2.100 [53.34]	1.650 [41.91]
MTJG-12-88JX1-FSG-PG	2 X 6	3.43 [87.10]	3.200 [81.28]	2.750 [69.85]

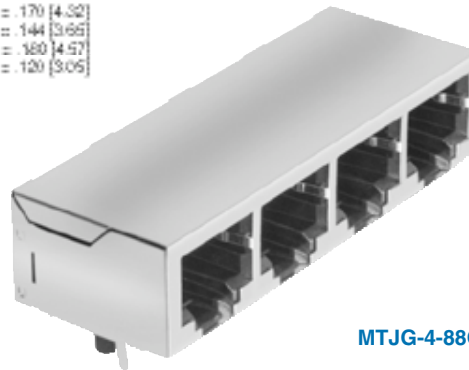
TYPE G GANGED

8p8c



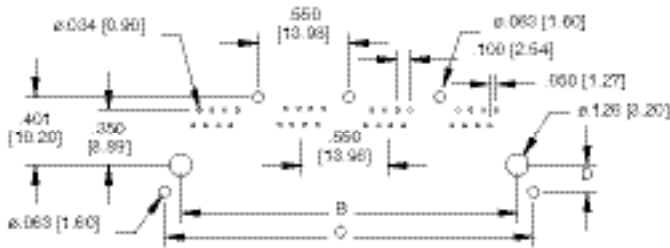
"D" DIM.
FSA = .170 [4.32]
FSB = .144 [3.65]
FSG = .180 [4.57]
FSE = .120 [3.05]

"E" DIM.
FSD = .120 [3.05]
FSR = .144 [3.65]



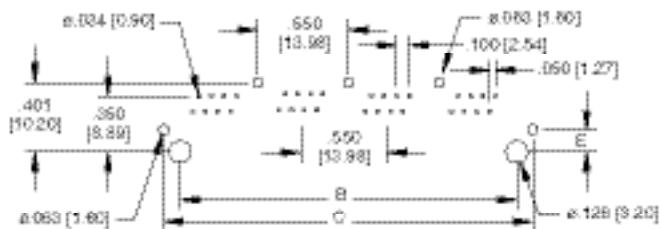
MTJG-4-88GX1-FSB

"D" DIM.
FSA = .170 [4.32]
FSB = .144 [3.65]



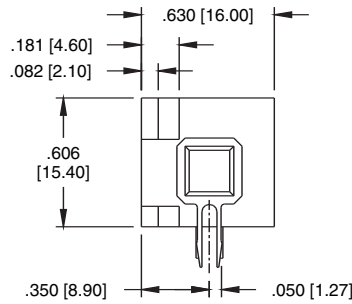
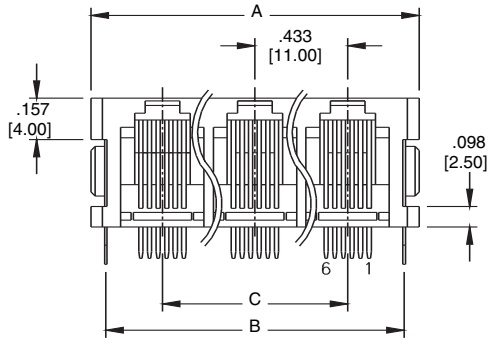
Recommended PCB Layout FSA & FSB

"E" DIM.
FSD = .120 [3.05]
FSR = .144 [3.65]



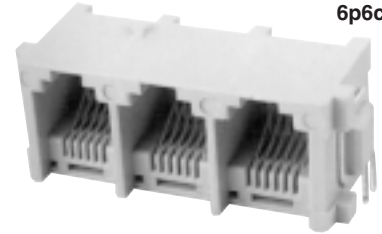
Recommended PCB Layout FSD & FSR

	<p>Recommended PCB Layout</p>
	<p>TYPE 5 6p4c 6p6c</p> <p>MTJG-3-665X1</p>
	<p>Recommended PCB Layout</p>
	<p>TYPE 5 SMT 6p4c 6p6c</p> <p>MTJG-3-665X1-SMT</p>
<p>OPTIONAL SPLITROUND PEG ADD -SP TO END OF PART NO. FOR SPLITROUND PEG OPTION</p>	<p>Recommended PCB Layout</p>
	<p>TYPE N METAL PEG 6p4c 6p6c</p>

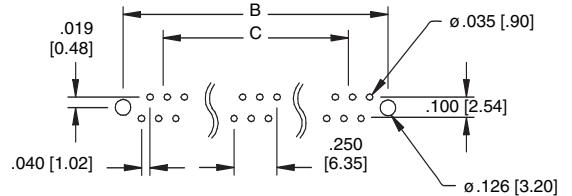
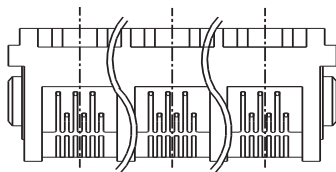


TYPE 7H
RIGHT ANGLE ENTRY

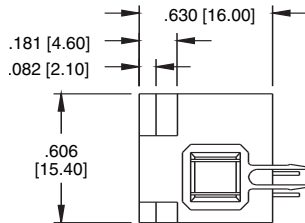
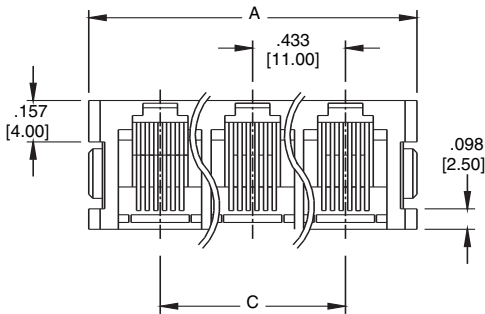
6p4c
6p6c



MTJG-3-667HX2

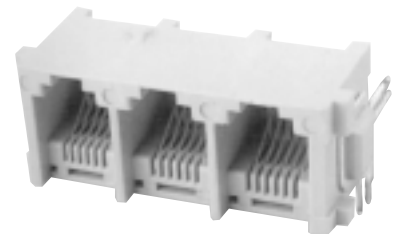


Recommended PCB Layout

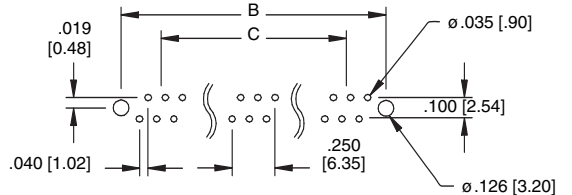
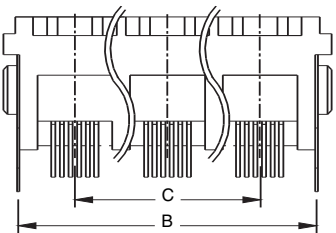


TYPE 7V TOP ENTRY

6p4c
6p6c

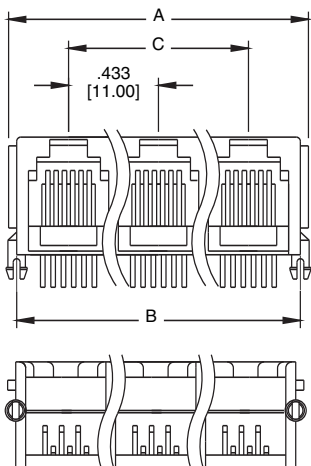
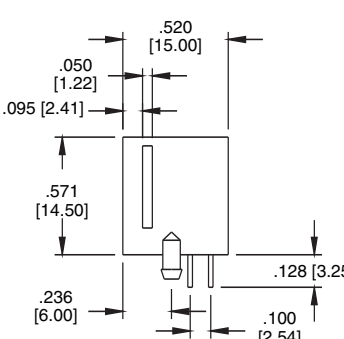
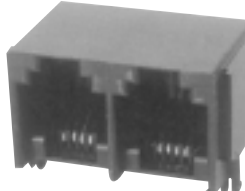
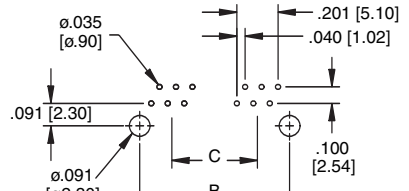
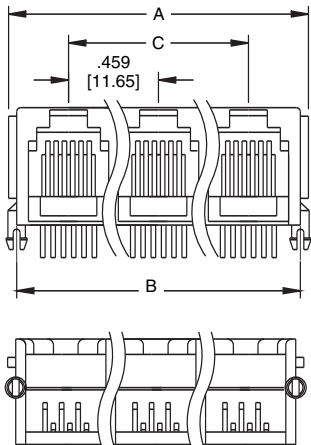
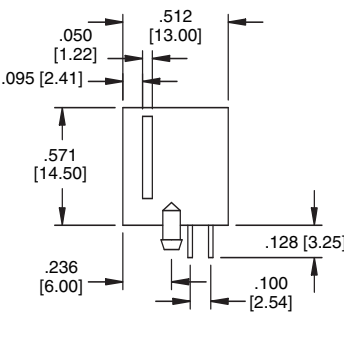
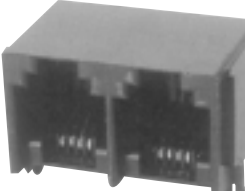
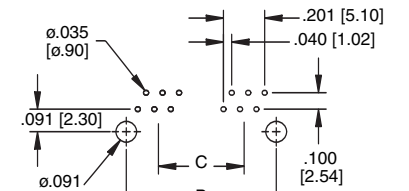
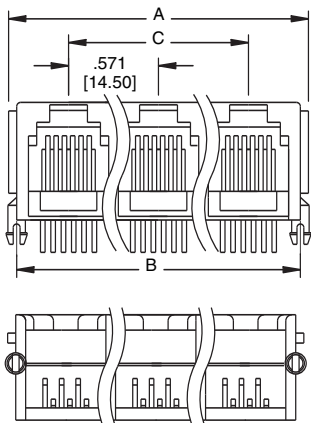
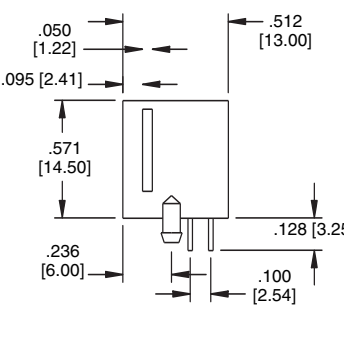
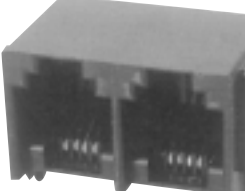
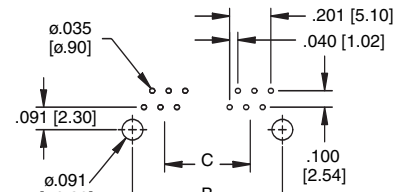


MTJG-3-667VX2

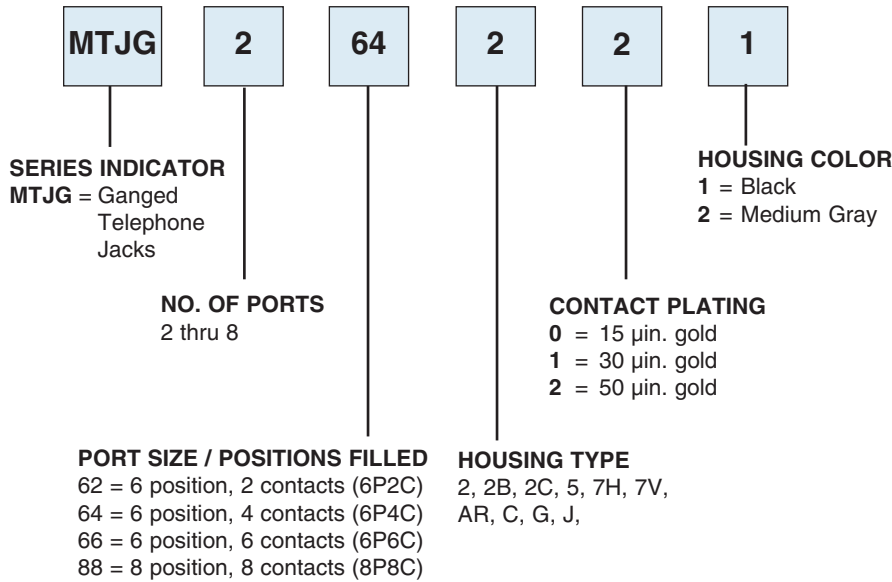


Recommended PCB Layout

DIMENSION	No of Ports						
	2	3	4	5	6	7	8
A	1.110 [28.20]	1.543 [39.20]	1.976 [50.20]	2.410 [61.20]	2.842 [72.20]	3.275 [83.20]	3.710 [94.20]
B	.992 [25.20]	1.425 [36.20]	1.860 [47.20]	2.290 [58.20]	2.724 [69.20]	3.157 [80.20]	3.590 [91.20]
C	.433 [11.00]	.886 [22.00]	1.299 [33.00]	1.732 [44.00]	2.165 [55.00]	2.598 [66.00]	3.030 [77.00]

 <p> $A = .433 [11.00] \times \text{No. of Ports} + .100 [2.54]$ $B = .433 [11.00] \times \text{No of Ports} + .020 [0.50]$ $C = .433 [11.00] \times \text{No of Ports} - 1$ </p>		<p>TYPE 2 6p4c 6p6c</p>  <p>MTJG-2-642X1</p>  <p>Recommended PCB Layout</p>
 <p> $A = .459 [11.65] \times \text{No. of Ports} + .100 [2.54]$ $B = .459 [11.65] \times \text{No of Ports} + .020 [0.50]$ $C = .459 [11.65] \times \text{No of Ports} - 1$ </p>		<p>TYPE 2B 6p4c 6p6c</p>  <p>MTJG-2-642BX1</p>  <p>Recommended PCB Layout</p>
 <p> $A = .571 [14.50] \times \text{No. of Ports} + .100 [2.54]$ $B = .571 [14.50] \times \text{No of Ports} + .020 [0.50]$ $C = .571 [15.50] \times \text{No of Ports} - 1$ </p>		<p>TYPE 2C 6p4c 6p6c</p>  <p>MTJG-2-642CX1</p>  <p>Recommended PCB Layout</p>

ORDERING INFORMATION MTJG SERIES GANG JACKS



OPTIONS:

Add as suffix to basic part no.

-S, -FSA, -FSB, -FSD = Fully shielded jack
(refer to specification page for illustration)

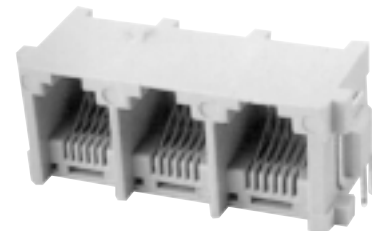
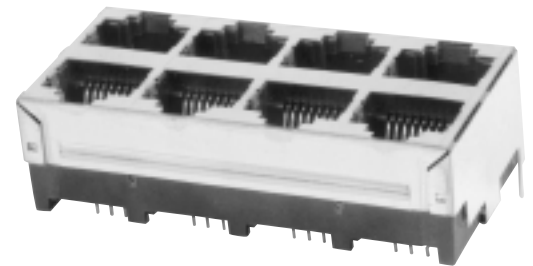
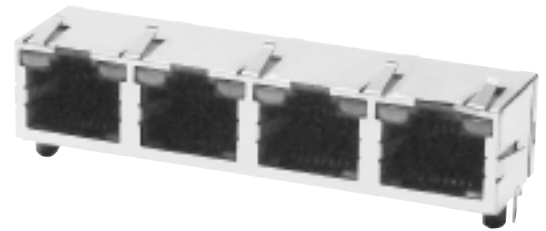
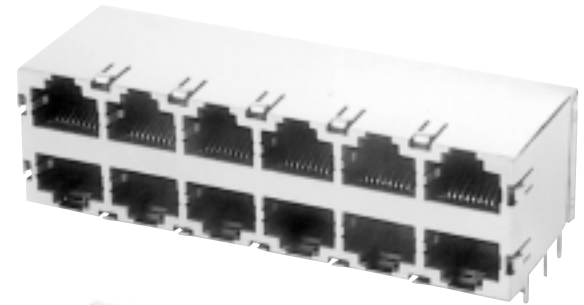
PG = Panel ground tabs

SMT = Surface mount tails with Hi-Temp insulator

LED CONFIGURATION		
SUFFIX	LED 1	LED 2
LA	YEL	YEL
LD	GRN	GRN
LG	YEL	GRN
LH	GRN	YEL
LI	ORG/GRN	ORG/GRN

Add suffix to end of P/N:

HI-TEMP
INSULATOR
AVAILABLE



TYPE AR
8P8C

MTJ-88ARX1-FS-SMT-LG
MTJ-88ARX1-FS-LG

Recommended PCB Layout

TYPE AR GANGED
8P8C

Recommended PCB Layout

LED CONFIGURATION		
SUFFIX	LED 1	LED 2
LA	YEL	YEL
LD	GRN	GRN
LG	YEL	GRN
LH	GRN	YEL
LI	ORG/GRN	ORG/GRN

Add suffix to end of P/N:

2, 4 & 8 PORTS AVAILABLE

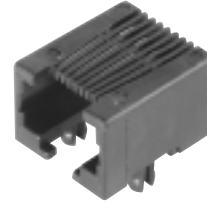
A = .620 [15.75] x No. of Ports + .029 [0.75]
 B = .620 [15.75] X No of Ports - 1 [+ .500 [12.70]]
 C = .620 [15.75] x No of Ports - 1
 D = .620 [15.75] x No. of Ports + .019 [0.50]

MTJG-4-88ARX1-FS-PG-LG

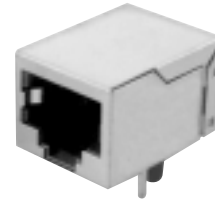
FILTERED MODULAR JACKS

TYPE M

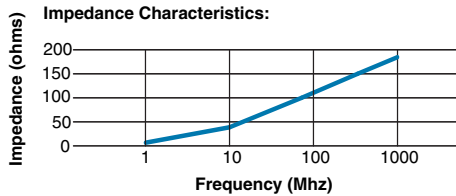
Inductive filtered modular jacks improve signal integrity and are available in a variety of styles including tin plated copper shielding with a choice of magnetic transformer or ferrite filter. Adam Tech offers drop in equivalents to all industry standard filtered jacks



MTJ-88MX1

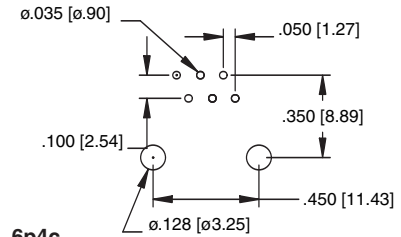
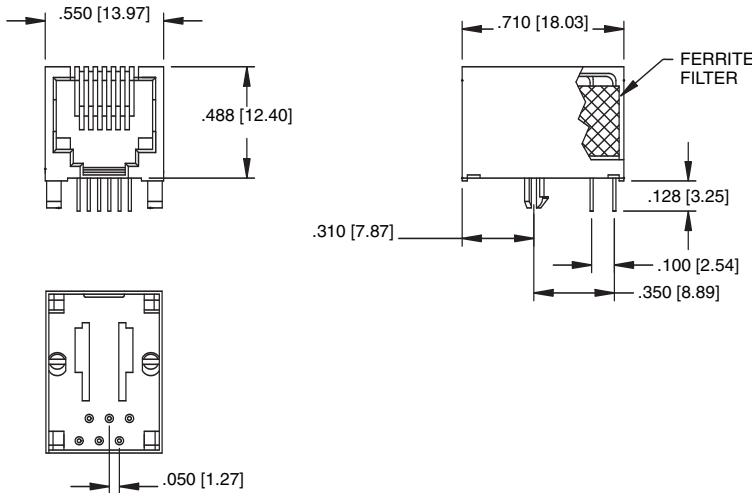


MTJ-88MX1-FSE

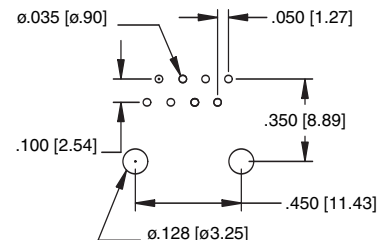


EMI FERRITE FILTERED JACK

Type M
6p6c
6p4c



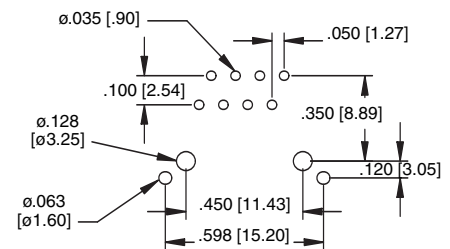
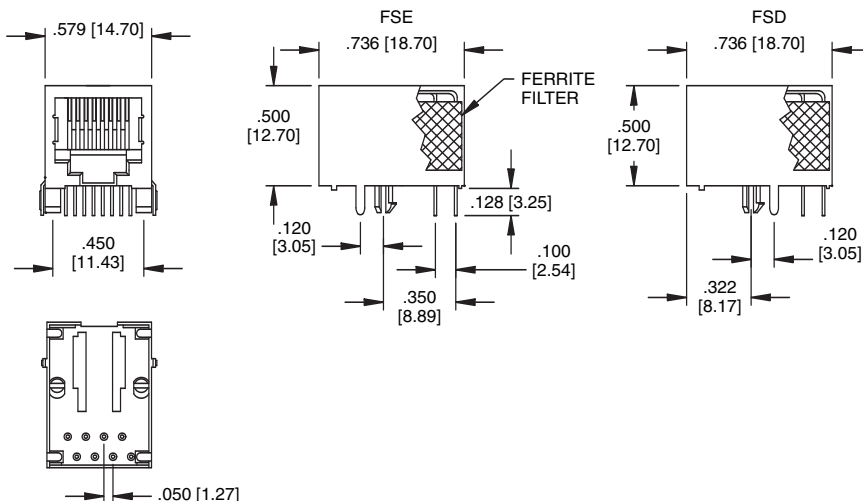
6p4c
6p6c **Recommended PCB Layout**



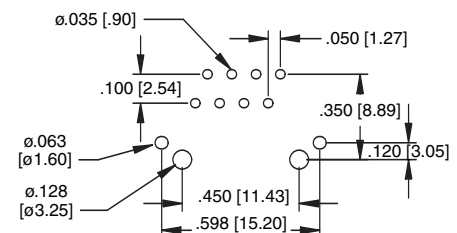
8p8c **Recommended PCB Layout**

EMI FERRITE FILTERED & SHIELDED JACK

Type M
8p8c



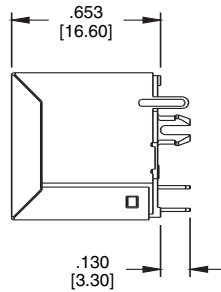
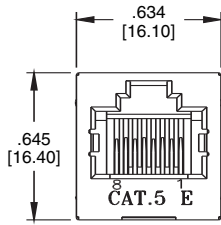
FSE
8p8c **Recommended PCB Layout**



FSD
8p8c **Recommended PCB Layout**

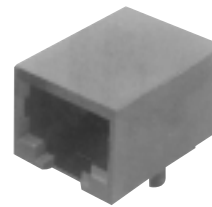
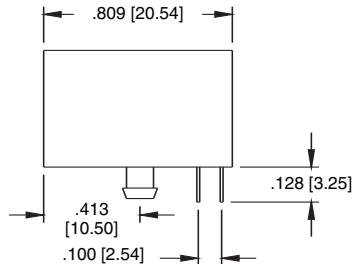
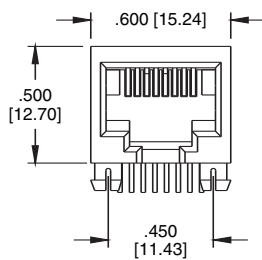
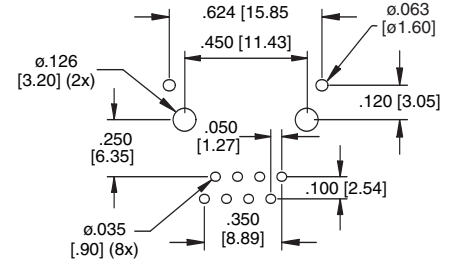
TYPE A, CATEGORY 5, TOP ENTRY

8P8C



MTJ-88AX1-FSE

Recommended PCB Layout

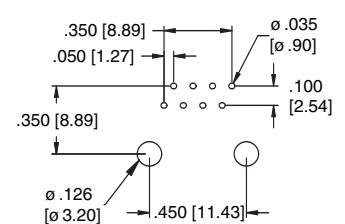


MTJ-88TX1

TYPE T, CATEGORY 5, SIDE ENTRY

8P8C

Recommended PCB Layout

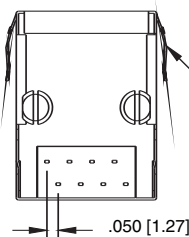
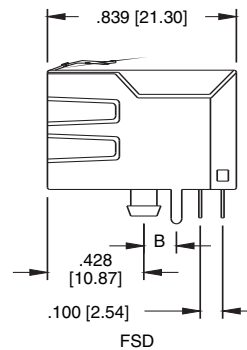
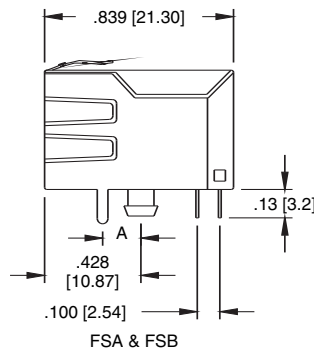
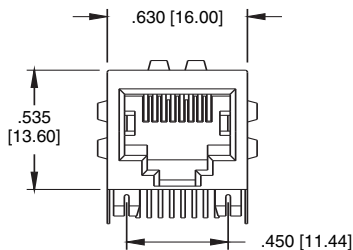


TYPE T, CATEGORY 5 SHIELDED SIDE ENTRY

8P8C



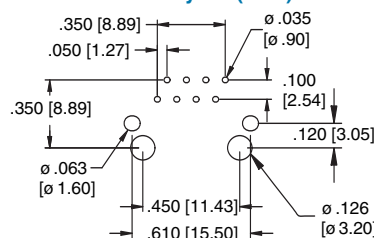
MTJ-88TX1-FSE-PG6



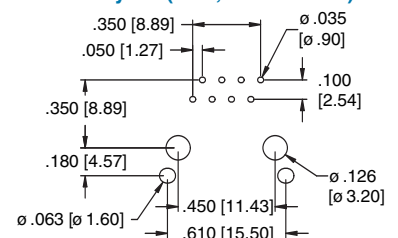
OPTIONAL
PANEL GROUNDS

SHIELD PIN LOCATION
FSA OPTION: A = .170 [4.32]
FSB OPTION: A = .144 [3.66]
FSE OPTION: A = .120 [3.05]

PCB Layout (FSD)



PCB Layout (FSA, FSB & FSE)



	<p>TYPE E 4p4c</p> <p>MTJ-44EX1</p> <p>Recommended PCB Layout</p>
	<p>TYPE E 6p4c 6p6c</p> <p>MTJ-66EX1</p> <p>Recommended PCB Layout</p>
<p>OPTIONAL KEY</p>	<p>TYPE E 8p8c</p> <p>MTJ-88EX1</p> <p>Recommended PCB Layout</p>

Technical drawings for Type H jack showing top, side, and front views with dimensions:

- Top View: .520 [13.20] (width), .118 [3.00] (height)
- Side View: .504 [12.80] (width), .551 [14.00] (height)
- Front View: .354 [9.00] (width), .098 [2.50] (height), .050 [1.27] (pitch)

TYPE H
8p8c

MTJ-88HX1 **MTJ-88HX1-FS**

Technical drawings for Type K jack showing top, side, and front views with dimensions:

- Top View: .450 [11.43] (width), .597 [15.18] (height)
- Side View: .626 [15.90] (width), .059 [1.50] (width), .138 [3.50] (height), .425 [10.80] (height), .611 [7.90] (height), .098 [2.50] (height)
- Front View: .598 [15.20] (width), .050 [1.27] (pitch), .350 [8.89] (width)

TYPE K
8p8c

MTJ-88KX1

Technical drawings for Type V jack showing top, side, and front views with dimensions:

- Top View: .728 [18.50] (width), .590 [15.00] (height)
- Side View: .626 [15.90] (width), .059 [1.50] (width), .138 [3.50] (height), .425 [10.80] (height), .611 [7.90] (height), .098 [2.50] (height)
- Front View: .618 [15.70] (width), .050 [1.27] (pitch), .350 [8.89] (width)

TYPE V
8p8c

MTJ-88VX1

Recommended PCB Layout

TYPE H	TYPE K	TYPE V
<p>PCB layout diagram for Type H jack with dimensions:</p> <ul style="list-style-type: none"> Top: .374 [9.00] (width), .110 [2.80] (height) Left: .574 [14.60] (height) Right: .118 [3.00] (width), .013 [3.40] (height) Bottom: .030 [0.75] (width), .050 [1.27] (height), .350 [8.89] (width) 	<p>PCB layout diagram for Type K jack with dimensions:</p> <ul style="list-style-type: none"> Top: .450 [11.43] (width), .076 [1.93] (width) Left: .386 [9.80] (width) Right: .197 [5.00] (width) Bottom: .050 [1.27] (pitch), .017 [43] (width) 	<p>PCB layout diagram for Type V jack with dimensions:</p> <ul style="list-style-type: none"> Top: .700 [17.78] (width), .450 [11.43] (width) Left: .118 SQ [3.00] (width) Right: .150 [3.81] (width) Bottom: .261 [6.62] (width), .076 [1.93] (width), .122 [3.09] (width), .050 [1.27] (pitch), .017 [43] (width)

TYPE W SHIELDED
8p8c
10p10c

MTJ-88WX1-FSB

Recommended PCB Layout

TYPE W SHIELDED SMT WITH PLASTIC PEG
8p8c

MTJ-88WX1-FSE-SMT-P

Recommended Solder Pad Layout

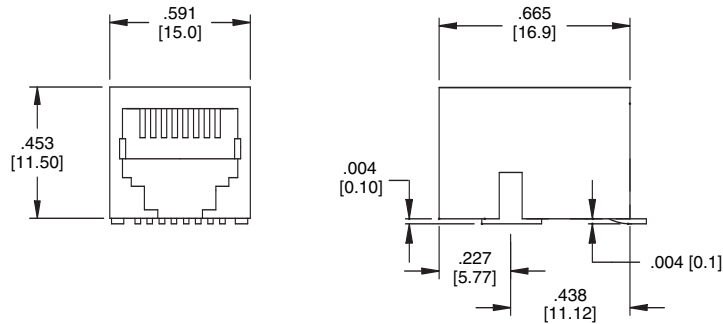
TYPE W SHIELDED TRUE SMT
8p8c

MTJ-88WX1-FS-SMT

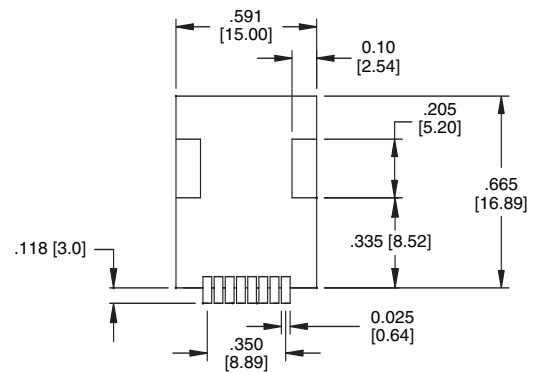
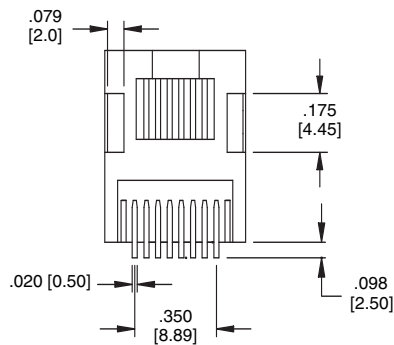
Recommended Solder Pad Layout

TYPE WA TABS IN

8p8c



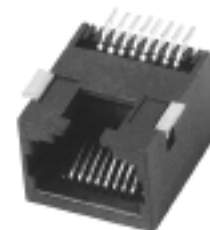
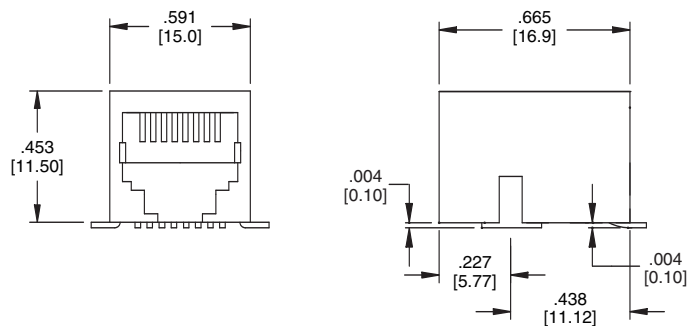
MTJ-88WAX1



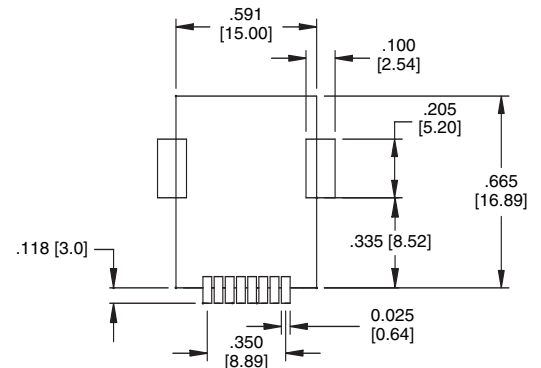
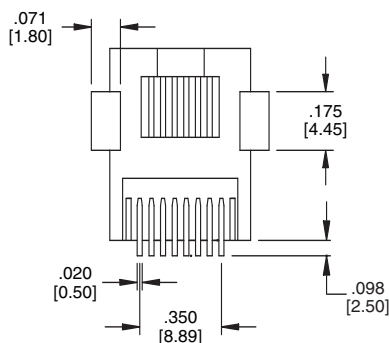
Recommended Solder Pad Layout

TYPE WB TABS OUT

8p8c



MTJ-88WBX1



Recommended Solder Pad Layout

Contact Options



Stranded
Wire
Contact



Solid
Wire
Contact

Cable Options



Flat Oval
Cable



Round
Cable



Flat Oval
Cable Offset
Latch

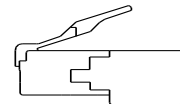


Round Cable
Offset Latch

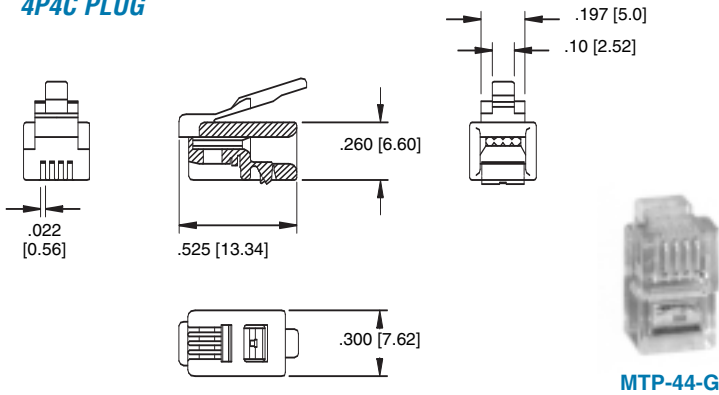
Plug with Metal EMI Shield Option



MTP-88-G-EMI

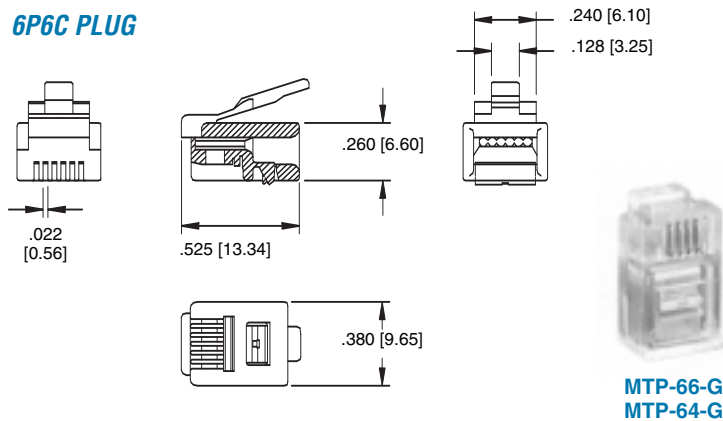


4P4C PLUG



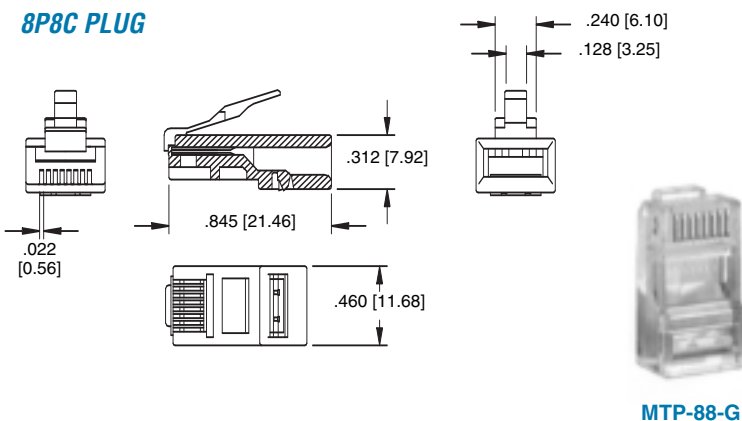
MTP-44-G

6P6C PLUG



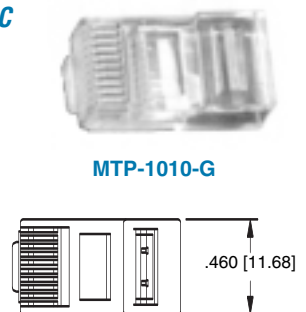
MTP-66-G
MTP-64-G

8P8C PLUG



MTP-88-G

10P10C PLUG



MTP-1010-G